

SEQUENCE LISTING

<110> Scala, Giuseppe
 Chen, Xueni
 Cohen, Oren J.
 Fauci, Anthony
 The Government of the United States of America
 as represented by the Secretary of the
 Department of Health and Human Services

<120> Novel HIV Related Peptides

<130> 015280-386200US

<140> US 09/869,003
 <141> 2001-06-22

<150> US 60/115,430
 <151> 1999-01-11

<150> US 60/132,760
 <151> 1999-05-06

<150> WO PCT/US00/00372
 <151> 2000-01-07

<160> 34

<170> PatentIn Ver. 2.1

<210> 1
 <211> 11
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence:antigenic
 determinant peptide

<220>
 <221> MOD_RES
 <222> (1)
 <223> Xaa = any amino acid not identical to the amino
 acid naturally flanking the subsequence at positions
 2-10 in HIV-1

<220>
 <221> MOD_RES
 <222> (11)
 <223> Xaa = any amino acid not identical to the amino
 acid naturally flanking the subsequence at positions
 2-10 in HIV-1

<400> 1
 Xaa Lys Ser Ser Gly Lys Leu Ile Ser Leu Xaa
 1 5 10

<210> 2
 <211> 11
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence:antigenic
 determinant peptide

<220>
 <221> MOD_RES
 <222> (1)
 <223> Xaa = any amino acid not identical to the amino
 acid naturally flanking the subsequence at positions
 2-10 in HIV-1

<220>
 <221> MOD_RES
 <222> (11)
 <223> Xaa = any amino acid not identical to the amino
 acid naturally flanking the subsequence at positions
 2-10 in HIV-1

<400> 2
 Xaa Cys Asn Gly Arg Leu Tyr Cys Gly Pro Xaa
 1 5 10

<210> 3
 <211> 11
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence:antigenic
 determinant peptide

<220>
 <221> MOD_RES
 <222> (1)
 <223> Xaa = any amino acid not identical to the amino
 acid naturally flanking the subsequence at positions
 2-10 in HIV-1

<220>
 <221> MOD_RES
 <222> (11)
 <223> Xaa = any amino acid not identical to the amino
 acid naturally flanking the subsequence at positions
 2-10 in HIV-1

<400> 3
 Xaa Gly Thr Lys Leu Val Cys Phe Ala Ala Xaa
 1 5 10

<210> 4
 <211> 9
 <212> PRT
 <213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:p195 epitope
antigenic determinant peptide

<400> 4

Lys Ser Ser Gly Lys Leu Ile Ser Leu
1 5

<210> 5

<211> 9

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:p217 epitope
antigenic determinant peptide

<400> 5

Cys Asn Gly Arg Leu Tyr Cys Gly Pro
1 5

<210> 6

<211> 9

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:p197 epitope
antigenic determinant peptide

<400> 6

Gly Thr Lys Leu Val Cys Phe Ala Ala
1 5

<210> 7

<211> 9

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:antigenic
determinant peptide

<400> 7

Glu Ala Thr Val Val Tyr Pro Ala Pro
1 5

<210> 8

<211> 9

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:p54 epitope
with no obvious sequence homology with HIV protein
domains

<400> 8
 Thr Lys Thr Leu Ile Tyr Gly Gly Ala
 1 5

<210> 9
 <211> 9
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence:p163 epitope
 with no obvious sequence homology with HIV protein
 domains

<400> 9
 Lys Arg Ile Val Ile Gly Pro Gln Thr
 1 5

<210> 10
 <211> 9
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence:antigenic
 determinant peptide

<400> 10
 Cys Cys Gly Cys Leu Thr Cys Ser Val
 1 5

<210> 11
 <211> 10
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence:antigenic
 determinant peptide

<400> 11
 Ser Gly Arg Leu Tyr Cys His Glu Ser Trp
 1 5 10

<210> 12
 <211> 9
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence:antigenic
 determinant peptide

<400> 12
 Phe Ala Leu Ser His Tyr Asp Lys Pro
 1 5

<210> 13
 <211> 9
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence:p689 epitope
 with no obvious sequence homology with HIV protein
 domains

<400> 13
 Arg Pro Thr Leu Arg Phe Gln Gly Ala
 1 5

<210> 14
 <211> 20
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence:p195 analog
 antigenic determinant peptide

<400> 14
 Glu Gly Glu Phe Cys Lys Ser Ser Gly Lys Leu Ile Ser Leu Cys Gly
 1 5 10 15

Asp Pro Ala Lys
 20

<210> 15
 <211> 20
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence:p197 analog
 antigenic determinant peptide

<400> 15
 Glu Gly Glu Phe Cys Gln Thr Lys Leu Val Cys Phe Ala Ala Ala Gly
 1 5 10 15

Asp Pro Ala Lys
 20

<210> 16
 <211> 20
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence:p217 analog
 antigenic determinant peptide

<400> 16
 Glu Gly Glu Phe Cys Cys Asn Gly Arg Leu Tyr Cys Gln Pro Cys Gly
 1 5 10 15

Asp Pro Ala Lys
 20

<210> 17
 <211> 20
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence:p287 analog
 antigenic determinant peptide

<400> 17
 Glu Gly Glu Phe Cys Cys Ala Gly Gln Leu Thr Cys Ser Val Cys Gly
 1 5 10 15

Asp Pro Ala Lys
 20

<210> 18
 <211> 12
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence:p335 analog
 antigenic determinant peptide

<400> 18
 Cys Ser Gly Arg Leu Tyr Cys His Glu Ser Trp Cys
 1 5 10

<210> 19
 <211> 9
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence:p54 analog
 antigenic determinant peptide

<400> 19
 Thr Lys Thr Leu Ile Tyr Gln Gly Ala
 1 5

<210> 20
 <211> 18
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence:gp120 v1 region
 (residues 112-120) of HIV1-U16374 primary isolate

<400> 20

Gly Thr Lys Thr Asn Asn Ser Ser Gly Lys Leu Ile Glu Leu Gly Glu
 1 5 10 15

Ile Lys

<210> 21

<211> 12

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:gp120 C2 region
 (residues 198-205) of HIV1-U116077 primary isolate

<400> 21

Leu Lys Cys Asn Asp Lys Lys Phe Cys Gly Lys Gly
 1 5 10

<210> 22

<211> 10

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:gp41 (residues
 602-605) of HIVANT70 primary isolate

<400> 22

Cys Lys Gly Lys Leu Val Cys Tyr Thr Ser
 1 5 10

<210> 23

<211> 9

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:conserved gp41
 domain consensus from HIV subtypes G and D

<400> 23

Ser Gly Lys His Ile Cys Thr Thr Asn
 1 5

<210> 24

<211> 9

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:conserved gp41
 domain consensus from HIV subtypes F and A

<400> 24

Ser Gly Lys Leu Ile Cys Thr Thr Asn
1 5

<210> 25

<211> 9

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: conserved gp41
domain consensus from HIV subtype E

<400> 25

Ser Gly Lys Ile Ile Cys Thr Thr Ala
1 5

<210> 26

<211> 9

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: conserved gp41
domain consensus from HIV subtypes C and B

<400> 26

Ser Gly Lys Leu Ile Cys Thr Thr Ala
1 5

<210> 27

<211> 9

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: p32 epitope
with no obvious sequence homology with HIV protein
domains

<400> 27

Glu Ala Thr Phe Val Tyr Pro Ala Pro
1 5

<210> 28

<211> 9

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: p287 epitope
with no obvious sequence homology with HIV protein
domains

<400> 28

Cys Ala Gly Gly Leu Thr Cys Ser Val
1 5

[illegible]

```

<210> 32
<211> 99
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:antigenic
      determinant peptide

```

```
<220>
<221> MOD_RES
<222> (1)..(45)
<223> Xaa = any amino acid not identical to the amino
acid naturally flanking the subsequence at positions
46-54 in HIV-1, may be present or absent
```

```
<220>
<221> MOD_RES
<222> (55)..(99)
<223> Xaa = any amino acid not identical to the amino
acid naturally flanking the subsequence at positions
46-54 in HIV-1, may be present or absent
```

```

<400> 32
Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
 1                               5                               10                               15

Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
                20                               25                               30

Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Cys Asn Gly
 35                               40                               45

Arg Leu Tyr Cys Gly Pro Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
 50                               55                               60

Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
 65                               70                               75                               80

Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
                85                               90                               95

Xaa Xaa Xaa

```

<210> 33
 <211> 99
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence:antigenic
 determinant peptide

<220>
 <221> MOD_RES
 <222> (1)..(45)
 <223> Xaa = any amino acid not identical to the amino
 acid naturally flanking the subsequence at positions
 46-54 in HIV-1, may be present or absent

<220>
 <221> MOD_RES
 <222> (55)..(99)
 <223> Xaa = any amino acid not identical to the amino
 acid naturally flanking the subsequence at positions
 46-54 in HIV-1, may be present or absent

<400> 33
 Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
 1 5 10 15
 Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
 20 25 30
 Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Gly Thr Lys
 35 40 45
 Leu Val Cys Phe Ala Ala Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
 50 55 60
 Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
 65 70 75 80
 Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
 85 90 95
 Xaa Xaa Xaa

<210> 34
 <211> 6
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence:gp41 epitope
 recognized by 2F5 monoclonal antibody

<400> 34
 Glu Leu Asp Lys Trp Ala
 1 5